

A differentiating RC circuit in the amplifying section of a photon counting system

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Abstract

It was shown in experiments that the application of a differentiating RC circuit with a time constant comparable to the rise time of the single-electron pulse in the amplifying section of a photon counting system increases the linearity range of the light characteristic. In this case, the maximum recorded intensity of the light flux increases approximately by a factor of 10, as compared with the maximum intensity measured without the RC circuit. © 2005 Pleiades Publishing, Inc.

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